



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

THE RELATION OF EDUCATION TO INDUSTRIAL EFFICIENCY: THE STUDY OF THE GENERAL PRINCIPLES OF ADMINISTRATION

EDWARD D. JONES

The University of Michigan

The economic evolution of the United States has been, in one of its phases, a process of developing inequalities of economic power. There has been created a hierarchy, which includes the greater portion of those engaged in gainful pursuits, and which fastens them together in a meshwork of relations of superior and inferior. This signifies that the majority have come into a position where they must take orders—where the character of their lives, from hour to hour, is conditioned by the furniture of ideas in the minds of their superiors. Correspondingly, it signifies that other men have been delegated to carry responsibilities, and have attained to work which consists chiefly of discretionary functions. In short, the phenomenon of economic leadership has emerged, and has become an essential characteristic of our times.

For one thing, the men of wealth have greatly increased in numbers. At first, an Astor fortune grew out of domestic commerce, and a Girard estate was amassed from shipping and trading abroad. Then, with the advent of railroads and factories, an ever-increasing company of preëminent ones appeared. While now, we refer depreciatingly to the great army of the merely rich; and even the frontier, which has always been relied upon as the safety-valve of our national economy, has become a region of principalities of land, timber, and coal in individual hands. So we are interested in the order-giving power which wealth confers.

But the necessity to society of having its leaders made reliable does not alone rest upon the fact that some of these leaders have attained great wealth. Everywhere, in this day of corporations, the administrative relationships involved in our social process of production are becoming tighter and more exacting. If once, in war, the impromptu action of a loose body of sharp-shooters availed much, if

Once the embattled farmers stood,
And fired the shot heard 'round the world,

the advice which our country is receiving, in this year of war, is to provide for her defense the power of masses of men trained to

strict military discipline. As in war, so in industry; initiative has become a matter of careful delegation. The rule of the superior executive has everywhere penetrated into new fields, and has increased in intimacy.

The earliest attitude of the public mind toward the business administrator was the naïve one of viewing his prosperity simply as the reward of virtue and enterprise. The subordination of others which was implied in it was looked upon as something merely temporary and optional, and even valuable, as a sort of training school on the way to an independent ultimate career. The abundant opportunities of the continent were trusted to confidently. These opportunities gave to the phrase "economic freedom" a significance not at all sarcastic. Lincoln was able to say, in his Annual Message of 1862, in response to the southern argument that the life-long wage earner was a virtual slave:

There is not, of necessity, any such thing as the free hired laborer being fixed to that condition of life. Many independent men everywhere in these states, a few years ago in their lives, were hired laborers. The prudent, penniless beginner in the world labors for wages awhile, saves a surplus with which to buy land or tools for himself, then labors on his own account another while, and at length hires another new beginner to help him. This is the just, generous, and prosperous system which opens the way to all—gives hope to all, and consequent energy and progress and improvement of condition to all.

But it is on record that Lincoln saw with concern the effect which the war was having in building up large establishments under the control of the few.

It has gradually become plain that inequalities of economic power have come to stay. The majority must be subordinates for life. Supermen have appeared, not only as once, in statecraft and war, but now in industrial affairs as well. Therefore, as once the problem of controlling political power absorbed thinkers, so now the method of hedging about our economic potentates, or of awakening in them ideals which shall make them safe, as agencies of the general welfare, is attracting attention.

As a nation we have become solicitous about the matter of opportunity. On a recent trip to this country, Mr. H. G. Wells observed that,

The American community is discovering a secular extinction of opportunity, and the appearance of power against which individual enterprise and competition are helpless. . . . That steady trend to-

wards concentration under individualistic rules, until individual competition becomes disheartened and hopeless, is the essential form of the economic and social process in America.¹

New Demands upon Economics

It is as this situation has become established in reality, and appreciated by the public mind, that the universities of the country have been called upon to give special training preparatory for business life. It seems reasonable to suppose that there is a connection between the two things. It suggests itself that, as upward climbing has become more difficult for propertyless youths, their parents have sought for them instruction in the nature of industrial processes so that, armed with knowledge, they might still rise to honor and a competency. But it seems equally probable that the public desires changes in industry, looking to the equalization of opportunity, and the more widespread enjoyment of the rational objects of life. At all events, it is clear that society is groping for the fit concept of what an industrial leader should be, and asks the universities to assist, and to train men who, when responsibilities are laid upon them, will make industry more efficient, just, and enjoyable.

Professional Courses

The most obvious response to this demand has been a vigorous evolution of special courses having to do with the applications of physical science; with economic morphology, or the relations of institutions to each other; and with the measurement, administration, and proprietorship of values through accounting and finance. Leaving at one side the question of the technical equipment which these courses provide for success in business, let us consider them for a moment, as instruments of social progress.

The American college student is familiar enough with general ethical principles, but he has doubts about their working out in detail. It is necessary, therefore, to descend into details, and to throw details into a rational order, as a science, to find out. This process lets in the light. "How many an action," says Gomperz, in his *Greek Thinkers*, "injurious to the common welfare, would have been left unperformed, had not a veil of misty thought concealed from the doer of it the fact that it belonged to a class of actions admitted by himself to be reprehensible."² This is particu-

¹ *The Future in America: A Search after Realities*. N. Y., 1906, pp. 91-92.

² Gomperz, T., *Greek Thinkers: A History of Ancient Philosophy*, London, 1901-12. Vol. II, p. 77.

larly applicable to those departments of business activity which have not been cleared, by scientific scrutiny, of popular fallacies, and of the harsh philistinism which hides behind the phrase "Business is business." The progress of economic and sociological studies, and the devising of such instruments of precision as accounting, is giving to everyone a more definite idea of the nature of social action and reaction in the economic field. It is supplanting the vague, pious generalizations by which men of generous impulse once expressed their hopes, and is putting in their place efficiency reports and sociological surveys. It is proving why certain harsh methods of foremanizing and deceitful methods of financing do not pay, and doing it with a cool and deadly certainty, like the soldierly advance of a piece of mathematical reasoning toward Q. E. D. Analysis is probing out the full significance of the plan of running a business in such a way as to throw upon the community the cost of skinned natural resources, or of an offended investing public. And so this work is making for righteousness.³ But it has been principally concerned with the physical, commercial, and financial aspects of the economic process. And it has remained largely on the plane of technique;⁴ and necessarily so, since it has been in the preliminary stage of investigation.

Culture Courses

This semi-professional education is, in undergraduate programs, accompanied with avowedly cultural courses in history, literature, philosophy, and the like. In graduate programs, it is preceded by them. Do these two elements of education—the professional and the cultural—fuse themselves into an interdependent whole in the student's mind? Does the student come into the special courses, with impersonal interest, to investigate some ideal of economic efficiency or justice there set forth, and to conceive

³ Bacon said, "An honest man can do no good upon those that are wicked to reclaim them, without the help of the knowledge of evil. For men of corrupted minds presuppose that honesty groweth out of simplicity of manners, and believing of preachers, schoolmasters, and men's exterior language; so as except you can make them perceive that you know the utmost reaches of their own corrupt opinions, they despise all morality. *'The fool will not listen to the words of the wise, unless you first tell him what is in his own heart.'*" *Advancement of Learning*, Book II.

⁴ It has been concerned with those fruitful "middle propositions" of which Plato speaks in his *Theaetetus*.

it with a certain "illumination and largeness of mind," as Henry Newman once said, "which belongs not to the study, but to his liberal education?"⁵ Or does he come inquiring how some ideal of conduct, born of his cultural studies, may be realized in terms of modern professional life? It is greatly to be feared that the connection between these two departments of study is not as close as it should be. The cultural concepts seem, often, to remain in a world apart, after the fashion of romanticism—in a world of fancy, or of the past—and not to get carried over as influences into the domain of the personal ambitions, and so to become effective upon conduct. In so far as this is the case, it is a defect calling for the construction of a bridging subject, to elucidate the significance of past cultural enthusiasms for present men of action.

Courses in Distribution

But there remain the regular courses in economics to take into account. These are the transitional subjects which now serve to connect the general and special courses. Do they bind the student's culture and his technique firmly together, and give him a consistent point of view, and the one likely to be the most valuable for this generation of leaders of industry? To the economist, the great affair in which society is involved seems to be, as for the labor leader, pretty exclusively a matter of the distribution of wealth, and of its control in the interest of a leveling process.

To discuss distribution comes very naturally to economists, for economics has usually dismissed the productive process summarily, with a few much-worn remarks on the division of labor, the rise of capital out of saving, and large-scale production, leaving the impression that the significance of the process lies practically in one thing only, namely, in the want-satisfying power of the product. It has then turned with relish to the detailed examination of the mass movements, and the general balancing processes, which determine the division of the product into rent, wages, interest, and profits. And so our science seems to rush eagerly on to reach the question, "What is there in it for me?" which it asks, chiefly, of a complex of impersonal forces, over which individual will has little control.

When a person asks this question, "What is there in it for me?" what inference do we draw? Do we not assume that the process, with its possible perfection, is overlooked, and that the interest has

⁵ *The Idea of a University*, Discourse VII, 6.

run on to the end or reward? What is the standing of this attitude in the arts and professions? Overemphasis of results means contempt for the process. A neglected process is a miserable one. A miserable process increases desire for results, until it becomes an anxiety or a greed, measuring in its intensity the extent to which one has been cheated of the fullness of life, during the process.

Many years ago, John Ruskin, one of the most sensitive of minds to the disharmonies of the social order, said, "Men have no pleasure in the work by which they make their bread, and therefore look to wealth as the only means of pleasure."⁶

Recently, when Henry James returned to this country, with mind made receptive to American impressions by years of absence, he gave us what he considered to be the fundamental formula of American life. He said,

These reflections connect themselves with the preliminary American postulate, or basis for any successful accommodation of life. This basis is that of active pecuniary gain, and of active pecuniary gain only—that of one's making the conditions so triumphantly pay that the prices, the manners, the other inconveniences, take their place as a friction it is comparatively easy to salve, wounds directly treatable with the wash of gold. . . . To make so much money that you won't, that you don't "mind," don't mind anything—that is absolutely, I think, the main American formula.⁷

Without subscribing to this, we may yet admit that there is a grain of truth in it.

Even the efficiency engineer, striving for a more scientific temper in industry, and realizing the necessity of friendly relations between management and men, rebukes the prevailing overemphasis of the distributive process. Thus, Mr. Taylor says,

The great revolution that takes place in the mental attitude of the two parties under scientific management is that both sides take their eyes off the division of the surplus as the all-important matter, and together turn their attention towards increasing the size of the surplus.⁸

Without in any way disparaging the importance of technical efficiency in production, or justice and generosity in distribution,

⁶ *Stones of Venice*, Ch. VI, "The Nature of Gothic."

⁷ *The American Scene*, London, 1907, p. 236.

⁸ Mr. F. W. Taylor, in Hearings before the Sp. Comm. of the House of Representatives, on the Taylor and other Systems of Shop Management, Washington, 1912, Vol. III, p. 1388.

is not another point of view needed? Is there not an element of industrial leadership which has been neglected? It seems to me that, by reason of recent developments in psychology, hygiene, ethics, et cetera, we have all become sensible that there is required a general readjustment of the methods of handling men in industry, to harmonize with the requirements of human nature.

What is Industry?

What is industry? It is more than a division of labor, or a use of capital, or a production of goods, or a distribution of profits. It is an art of life: its inevitable product some sort of character. It is a daily relation of human beings, who are richly endowed with sensibilities, and who possess a pathetic capacity for indifference, shortsightedness, and brutality; and for enthusiasm, loyalty, and sacrifice. An industrial establishment should be a company of brothers banded together for mutual aid and the public good, and sustaining each other with sympathy in a process of self-expression. The most significant thing about industry is that it is a process of dealing with human nature. For men of talent it is chiefly an opportunity for leadership.

What the military leader was in the days of constant war, and the statesman was in the period of the formation of great states, the industrial executive is in this commercial age. He is the leading exponent of organized action in the world. Carlyle, familiar with the history of captains of war, called our industrial leaders Captains of Industry, and said of them, "The leaders of industry, if industry is ever to be led, are virtually the captains of the world; if there be no nobleness in them, there will never be an aristocracy more."⁹

So a new power has appeared. The community has turned to the universities to assist in making sure that the administrators of it shall be enlightened, but more than technically enlightened, shall be humanized. What then can the life, itself, in industry, be made through the best leadership? What sort of a Shepherd of his People, to use Homer's phrase for Agamemnon, do we want the future business administrator to be?

Necessity of the Study of Leadership

Is there anything more natural and reasonable, as an answer to this question, than the suggestion that we endeavor to discover

⁹*Past and Present*, Bk. IV, Ch. IV.

what fine leadership has signified in the past; that we bring the wisdom of former times to bear upon the problems of the present? But, it may be responded, economic leadership of the present sort is recent. It has little history; and what there is has been half forgotten, half concealed. This may be freely conceded. It is to be hoped that some day the history of the first generation of American captains of industry will be written. Conceived with imagination, it will prove as interesting as the history of the despots of the Italian Renaissance. But, meantime, we need not wait for it. There is a long and fascinating history of administration, pertaining to the work of great military leaders, and statesmen, diplomats, reformers, the framers of ecclesiastical policy, and other prominent ones who have made for themselves a lasting mark in some field of the domain of organized action. In these lines of human affairs we can find the publicity of details essential to the judgment of actions. Each line will serve to bring certain things most clearly to view: each will stress certain virtues, or unmask certain faults. Each will bring us into stimulating contact with a separate group of forceful personalities.

But it may again be objected that these are different fields of leadership, and that the results of experience cannot be carried over from one to the other. It is true that there are differences in climate, and language, and country, and period. In war the use of artillery involves a different combination of the laws of physics and chemistry from that of the machine in industry. This would be important if we had in view courses in applied physical science. Likewise, it may be urged that political action is not restrained by the cost of production, in the sense that normal industry is; and that its results cannot be promptly evaluated or liquidated, to facilitate a turn-over. This would be pertinent if we had in view courses in the administration of values; such as accounting, appraising, financing, and investing. But these objections do not hold when we have in view the study of business administration, as the art of handling men. Here the subject-matter is human nature. The administrator in whatever sphere he works has to judge men, and understand how judiciously imposed responsibilities develop them, and how dangerous failure is to them. He has to safeguard against the same human defects of ill-will, selfishness, and despondency; and he places reliance on the same factors of ambition, intelligence, and stability of character.

Xenophon reports for us a conversation between Socrates and

a disappointed candidate for military office, in which Socrates pointed out that the qualities essential to good generalship are employed by the merchant who is able to collect a stock of goods, by the leader of a chorus who finds competent teachers, and by the manager of a household who successfully governs the movements of a body of workmen and slaves. At the conclusion of the discussion Socrates pointed out that there was in all these matters a central art of managing men. He said:

The conduct of private affairs differs from that of public concerns only in magnitude; in other respects they are similar, but what is most to be observed is that neither of them is managed without men, and that private matters are not managed by one species of men, and public matters by another; for those who conduct public business make use of men not at all differing in nature from those whom the managers of private affairs employ; and those who know how to employ them conduct either public or private affairs judiciously, while those who do not know will err in the management of both.¹⁰

Administration as a Theme in Culture Courses

It may still be objected that it is unnecessary to make a special effort to analyze the relationships involved in joint action, for the benefit of the industrial leader, since it is the object of courses in literature and history to deal with the most inspiring manifestations of human faculty, by virtue of which we call them humanities. I should be very happy to think that the stirring story of leadership was not being hidden from the student's attention by philology and archaeology and literary criticism and the treatment of history as a commentary on theories of sovereignty and other intervening viewpoints. But I fear that this story is not being made a transforming power in the minds of present college men.

But even if teachers of business administration have the good fortune to work in harmony with the humanities, they are, nevertheless, in a position to perform a particular function. They can give a special point to the history of joint action. They can deduce rules of administration, and present them as matters applicable to the present-day business executive. Furthermore, they have the opportunity to deduce the best methods and reveal the most inspiring aims, and yet remain entirely free from suspicion of cant or professional bias. It will be recognized that they are not obliged to point a moral, as teachers of ethics, nor magnify an historical character, as a specialist on some historical period

¹⁰ *Memorabilia*, (J. S. Watson), Bk. III, Ch. IV.

riding his hobby, but that they bring forward these things because they make for efficiency.

Arrangement of Materials

The material of courses devoted to the human nature of joint action may be grouped, either with the object of bringing out most prominently the personality of individual leaders, or with the main purpose of elucidating the principles, one by one. Best of all, perhaps, is some compromise plan of taking up one principle at a time and elucidating it by a single, carefully-studied, and fully-presented episode from the life of a great administrator.

Study of Individual Leaders

The first arrangement, which aims to bring personality into view, has the advantage of interest and an atmosphere of reality. Individual example, which transcends every other influence upon conduct, is brought into play. To raise the ghost of past leaders, throws the present administrator into historical perspective as a spiritual heir, upon whom rests a mandate not to disgrace the succession. It is as if the student who is looking forward to a career as an executive were taken into a gallery containing the portraits of his ancestors and, hearing tales of their heroism, were fired to dedicate himself to a like chivalry.

Reviewing the lives of administrators, we may perceive, in such a man as Napoleon, an astonishing mastery of detail, coupled with weakness in demanding too rigid an obedience from his marshals, and in tolerating no advisors of independent mind at his court. Unshakeable decision may be seen in Lincoln, while in the pages of Guicciardini we may read of the fatal irresolution of Clement the Seventh. Of Lincoln it is said, "He was never known to offend. On the other hand, he was never known to give in on an essential point."¹¹ Could we find a better starting point for the study of diplomacy—there, and in the candor of Lincoln's secretary, John Hay?

For the effects of concentration upon principal aims we may review the life of Grant, which seems to have been framed on Bacon's advice, "Go through with that which is in hand, and interlace not business, but of necessity"¹²; while Lord Brougham¹³

¹¹ Rose Strunsky, *Abraham Lincoln*, N. Y., 1914, p. 295.

¹² "Of Great Place."

¹³ Lord Henry Brougham, 1778-1868.

will provide the picture of scattered energies. On compromise and the middle course Sir Henry Savile can teach us; while Chatham will serve as an illustration of a statesman ready for extreme measures. In Robert E. Lee we may observe the function of religious faith in easing the mind of anxiety, after duty is performed. Efficiency in defeat may be illustrated by Wolsey's extraordinary fertility of invention, Richelieu's power of making the most of all circumstances, Mazarin's cool objective temper, and Beaconsfield's courage.

If we wish to study the talents which reveal themselves in speed of execution, there is the story of Sir Henry Vane's construction of the English navy under Cromwell, while the philosophy of judicious delays extends from Fabian to Joffrey. On the choice of men Cromwell gives us the grand test of moral force, saying, "I raised such men as had the fear of God before them, and made some conscience of what they did, and from that day forward, I must say to you, they were never beaten. . . . And truly this is matter of praise to God, and it hath some instruction in it, to own men who are religious and godly."

If we would learn how proper limits may be set to effort, there is the history of Frederick the Great, who never overreached himself, while, contrariwise, in the policy of Laud and Strafford, denominated by the word "thorough," and in the answering "root and branch" of the Parliamentary leaders, we may observe the stern virtue of avoiding half measures overstepping practical limits.

In Wellington's career we may trace, working together with immense capacity and devotion, the results of aloofness, and indiscriminate praise and blame, and finally, in his political life, intolerance; while Julius Caesar, that predecessor whom he resembled in arms, challenges our admiration for his art of making common cause with his men, his astonishing power of searching out and rewarding those who deserved praise, and his leniency where the motives of his opponents were honorable.

The Study of Principles

The advantage of arranging material for the student, with the chief object of bringing out the principles of joint action, is that with such a plan the way is opened for the introduction of precepts from the wisdom literature, gems of advice from the maxim writers, the discussions of strategy, the rules of investigation

which constitute the scientific method, together with facts from psychology, and postulates from ethics. By this arrangement of the subject, greater stress is put upon the reasoning involved. The student becomes accustomed to trace analogies between activities of diverse kinds, and to formulate the general or pure principles common to those activities. While the results are not so vivid as in the other arrangement, they tend to be left in the student's mind in a more clear-cut and compact form, apt for ready use, somewhat as a creed or code of action.

Of the many principles of administration, which offer themselves for inculcation, but a word or two can be said. What may be called the mechanics of organization will involve the definition and distribution of authority and responsibility, including the necessary distinctions between planning and execution, and between general matters and details. It will aim at the adjustment of capacity to function, and the establishment of control through standards, sequences, and schedules, with individualized orders and records, tasks and rewards. These various steps combine to bring into existence a group of agencies, coördinated to mutual functioning, and taking the form of a system, including every individual and operation, and providing an avenue for the downward passage of ideas associated with initiative and the upward movement of facts connected with response.

When attention is turned to questions of policy, the student will find his energies awakened by the fascinating variety and the sobering depth of significance of the subject. What are the various types of discipline which, in all degrees, from mere instinctive obedience up to the most intelligent loyalty, have ever been relied upon to insure response to constituted authority? In what proportions are confidence in leadership and confidence in the coöperation of comrades blended in discipline? In coördinating various agencies, what is the applicability of the rule that only factors of analogous degrees of excellence should be united? "No man seweth a piece of new cloth on an old garment." And what are the limits of the counsel that the manner of a part must conform to the manner essential for the whole?

What, likewise, are the limits of the policy of preliminary preparation, of which the German army has again given the world a striking illustration? It is, undoubtedly, a prime means of storing up a portion of the current energy of an organization for concentrated delivery at a future time. But what of the saying of Pit-

ticus, "Only power reveals the man"; an idea more explicitly expounded by Louis XIV to his son, when he said, "The higher the position, the more it has objects that cannot be seen or known until we occupy it." Again, there is a connection between preliminary preparation, with its tendency toward a fixed objective, and the disregard of small incidental successes. The value of the latter Sir Walter Raleigh, having in mind the uncertainties of fortune, emphasized. In yet another direction preliminary preparation bears upon the policy of seizing the initiative, for it has been well said that one can only plan specifically for what he himself initiates.

When we have as great a respect for human nature as for the nature of machines, and the value of products, we shall want the administrator to understand the character of attention and the significance of pleasure in work. If the time ever comes when what is now accepted as established in psychology, concerning the conditions under which human talents find efficient expression, becomes accepted in industry there will be a great revolution. The nature of many tasks will be changed, and the method of presenting tasks will be changed. The waste of monotony and the debilitating effect of divided attention is well understood in education. So also is the significance upon conduct of a deep-seated sense of injustice, understood in penology.

We call this the age of competition, but do we realize what can be achieved through the instinct to excel? The Athenians had competitions between potters and painters and sculptors, and athletes and dancers and choruses, and rhetoricians and dramatists;¹⁴ and by this means they gave themselves an amazing variety of interests and sources of pleasure.

The fascination of junctures of socialized achievement¹⁵ for the human mind, and the energy developed by the anticipation and recollection of them, is annually illustrated on the college football field. There is no doubt but that two of the most suggestive forms of human activity which industrial leaders can now study

¹⁴ See W. S. Ferguson, *Greek Imperialism*, pp. 58-60.

¹⁵ "The highest efficiency, whether in industries, or in the pursuit of knowledge and truth, must always be the result, not of utilitarian motives or routine processes, but of gregarious idealism and human passions."—Pres.-Emeritus Chas. W. Eliot, *The Independent*, Nov. 13, 1914.

¹⁶ "Work which in itself causes delight is executed as perfectly as possible. If genius is synonymous with love, then the mode of action of the man of

are art and sport.¹⁶ Both exceed industry in evoking energy, and yet re-creating it; both are rich in pleasure, in which industry is poor.

Contrast industry and football. In industry, for the subordinate, at least, we provide no audience to make his achievement a social thing; we suppress the score until the end of the month or year and, to follow the analogy a step farther, we arrange, with perverse magic, that at each play the ball shall pass out of sight into the next shop or office, so that each player sees but a fragment of the game.

The root of power is the instinct to create some complete thing. The act of creating is the effort to give expression to our pleasure, and lasting form to the source of it. If anything so rich in enthralling climaxes of socialized action as sport agrees with human nature, what can be said of the psychology of that kind of industrial administration which substitutes the idea of serving for that of creating, and which takes away pleasure and leaves in its place only pay.

Every man has a right to a normal incentive. A normal incentive is composed not only of fair pay and promotion, but a conviction of the importance of the thing done and, meanwhile, the pleasure of achieving some superior method or art connected with the doing of the work, and which gives to the process of self-expression involved exultation, or the quality of a triumph. There

genius will consist in doing what he does with all his soul, with a complete devotion to the work itself, be it what it may. The narrow-minded man is astonished at what is apparently child's play to the genius, and does not see that it is in point of fact somewhat of the nature of *play*, since the man of genius takes pleasure in the work for itself and the actual, practical purpose falls more into the background. Anything done merely because it gives pleasure, an act performed solely for its own sake, we call play; so that, however strange it may sound, the more a man's whole heart is in what he does and the more objective, disinterested, inspired by genius a man is in his action, the more will it acquire the nature of *play*, or *free activity*, the aim or idea of which is centered in itself.

"The more a man, on the other hand, looks to what he hopes to attain by his work, the pecuniary profit it may yield, the satisfaction of his vanity, and similar ends, the less importance will he attach to the work itself, the greater will be the dislike combined with the performance of it, and the more imperfectly will it be executed." Herman Türck, *The Man of Genius*, Schwerin i, M., 1914, Ch. 3, "Conduct in Practical Life." pp. 53-54.

To increase the element of pleasure in industry will be to bring industry more nearly into Aristotle's category of things which are liberal. See, *Rhetoric*, I. 5.

is, then, a calculus of moral sentiments intimately interlaced with all economic study. President-Emeritus Eliot has said,

The real motive power in every human life, and in all national life, is sentiment; and the highest efficiency cannot be produced in any human being unless his whole character and his whole activity be dominated by some sentiment or passion.¹⁷

Likewise William James says,

There is something which can make you efficient in spite of your untrustworthy memory and your wandering mind, and that something is passion for your work.¹⁸

In accord with this Mr. Maude, an English military expert, says,

The man who would fit himself for the highest commands in war, or even for the criticism of those who exercise them, must never for one moment forget that the momentary spirit of the mass he directs is the fundamental condition of the success of every movement. Just as there is no movement so simple that its success may not be jeopardized by ill-will and despondency in execution, there is hardly any limit to what willing men can achieve.¹⁹

The conclusions here quoted are very similar to those at which the leaders of scientific management have arrived.

Time fails to speak of understudies, and of the arrangement of men in promotion chains, of cabinets and committees, of the means of giving to policy proper flexibility, of the function of compromise, of the many fine rules of diplomacy, and of the democratic theory that those pleasures are greatest which are shared.

Literature.

The literature of administration, considering the sense in which administration is here used, is extensive. First of all, there is biography, infinite in amount, from ancient Plutarch²⁰ to modern Bradford,²¹ writing of *Lee, the American*, and varying in quality from the stern stuff which came from under the heavy hand of Carlyle,²² to the light workmanship of La Bruyère²³ and Sainte-

¹⁷ Eliot, C., *Education for Efficiency and the New Definition of the Cultured Man*. N. Y., 1909, p. 27.

¹⁸ James, Wm., *Habit*, N. Y., 1914.

¹⁹ Maude, F. N., Article "Strategy," *Encyc. Brit.*, 11th Ed.

²⁰ *Lives*, Boston, 1902; *Political Precepts*, Boston, 1906.

²¹ Bradford, G., *Lee, the American*, Boston, 1912.

²² Especially, "History of Frederick II of Prussia"; and "On Heroes." See *Works*, Centenary Edition. 30 Vols., N. Y., 1896-1901.

²³ La Bruyère, Jean de, *The Morals and Manners of the XVII Century; Being the Characters of La Bruyère*. Trans. by Helen Stott, London, 1890.

Beuve.²⁴ For the study of benevolent tyrants (or the benevolent study of tyrants) there are Mommsen's²⁵ chapters on Sulla and Julius Caesar. For the rôle of intuition as an aid to leadership, there is Monypenny's *Disraeli*.²⁶ For tenacity of purpose there is Thayer's *Cavour*.²⁷ It is well to seek out the great analyzers of human motives, such as Samuel Johnson, Bacon, Bulwer, Goethe, and Emerson.

The philosophy of joint action may be found in the wisdom literature, extending from *Proverbs* to Bacon's *Advancement of Learning*. There is much of it in such maxim writers as La Rochefoucauld²⁸ and Chamfort,²⁹ as well as in the aphoristic paragraphs of Goethe³⁰ and Schopenhauer.³¹ Besides these, there are pertinent treatises by lesser men not to be overlooked, such as Sir Walter Raleigh's *Cabinet Council*,³² John Foster's *Decision of Character*,³³ Lecky's *Map of Life*,³⁴ and Sir Arthur Help's *Essays*.³⁵

The early literature of political science, before modern constitutions so greatly hedged the executive about, is suggestive. And especially thought-provoking is the literature of the Renaissance, when the principles of politics were in such a formative and unreconciled state as the principles of business administration are now. And here there is particularly to mention the writings of Machiavelli.³⁶ It is well to accompany the study of the products of this

²⁴ Sainte-Beuve, C. A., *Portraits of the XVII Century*. Trans. by K. P. Wormeley, 2 Vols., N. Y., 1904. *Portraits of the XVIII Century*. Trans. by K. P. Wormeley and G. B. Ives, 2 Vols., N. Y., 1905.

²⁵ Mommsen, T., *History of Rome*. Trans. by W. P. Dickson, 5 Vols., N. Y., 1903. "On Caesar." Bk. V, Ch. XI. "On Sulla." Bk. IV, Ch. X.

²⁶ Monypenny, W. F., *The Life of Benjamin Disraeli, Earl of Beaconsfield*. London, 3 Vols., 1910-14 (Vol. 3 by G. E. Buckle).

²⁷ Thayer, W. R., *The Life and Times of Cavour*. 2 Vols., Boston, 1911.

²⁸ La Rochefoucauld, F. Duc de, *Reflections or Sentences and Moral Maxims*, N. Y., 1900.

²⁹ Chamfort, S. R. N., *Maximes et Pensées Morales*, Paris, 1892.

³⁰ Goethe, J. W., *The Maxims and Reflections of Goethe*. Trans. by T. B. Saunders, N. Y., 1893.

³¹ Schopenhauer, A., *The Wisdom of Life*, Trans. by T. B. Saunders, London, 1902. *Counsels and Maxims*, Trans. by T. B. Saunders, N. Y., 1899.

³² Raleigh, Sir W., *The Cabinet Council* (in Works), Vol. 8, Oxford, 1829.

³³ Foster, John, *On Decision of Character*, N. Y., 1875.

³⁴ Lecky, E. W., *Map of Life: Conduct and Character*, N. Y., 1899.

³⁵ Helps, Sir A., *Essays Written in the Intervals of Business*, London, 1890.

³⁶ Machiavelli, N., *The Prince*, Trans. by N. H. Thomson, Oxford, 1897. *Discourses on the First Decade of Titus Livius*, Trans. by N. H. Thomson, London, 1883.

penetrating mind with the explanations of Morley,³⁷ Villari,³⁸ and Lord Acton.³⁹

Military science deserves careful attention, for it is, at present, the most highly developed branch of administration, with the possible exception of political science. It differs from the latter in that little sacrifice of efficiency has been tolerated for the sake of democratic distribution of power. The emphasis which this literature places on the rugged virtues imparts to it something of the strength of soul of the classics. The great work in this field is that of General Karl von Clausewitz, the Father of German Strategy. It bears the simple title *On War*.⁴⁰ The writings of the officers of the general staffs⁴¹ of Germany, England, and France constitute a reliable body of professional treatises, the general tone of which is surprisingly broad and philosophical.

To offset the influence of studies in strategy, the student may turn to the literature of art, especially of that portion of it which considers art as a phase of self-expression, and as a source of pleasure in work. Here two names suggest themselves to us at once: John Ruskin⁴² and William Morris.⁴³

It is, of course, unnecessary to make particular reference to the literature of personal efficiency, psychology, and scientific management.

Conclusion.

The project, then, which I would urge upon teachers of economics and business administration, in our colleges and universities, is to regard the business leader not merely as a ruler of matter and force, or as a calculator of value relations, but as a leader of his

³⁷ Morley, J., *Machiavelli*, London, 1897.

³⁸ Villari, P., *Life and Times of Niccolo Machiavelli*, Trans. by Linda Villari, N. Y., 1898.

³⁹ Acton, Lord (J. E. E. Dalberg), Introduction to L. A. Burd's Edition of *Il Principe*, Oxford, 1891. Mr. Burd's Introduction may also be read with profit, as well as his chapter (VI), "Florence II, Machiavelli," in Vol. I, of *The Cambridge Modern History*, Cambridge (Eng.), 1902.

⁴⁰ von Clausewitz, Gen. Karl, *On War*. Trans. by Col. J. J. Graham, 3 Vols., London. 1908.

⁴¹ See the works of F. N. Maude, S. F. R. Henderson, and S. Wilkinson. Translations may be had of certain works of Freiherr C. von der Goltz, Lieut.-Gen. R. von Caemmerer, Gen. H. K. C. von Schellendorff, and of Col. Vachee.

⁴² Ruskin, J., *Stones of Venice*, N. Y., 1897, especially Ch. VI, "On the Nature of Gothic."

⁴³ Morris, Wm., *Hopes and Fears for Art*, N. Y., 1901. *Signs of Change*, N. Y., 1903.

fellows. And this, not alone with reference to the leisure and wealth won from industry, but in the life of industry itself. The evolution of technique is constantly putting new instrumentalities into the hands of executives; a point notable, for example, in connection with scientific management. New power always raises questions of the proper restraints of method, and the ultimate ends. By making a broad study of methods and ends, as they have shaped themselves in the hands of the world's leaders in various lines of joint effort, students will be encouraged to range more boldly up and down the world of thought, in search of their intellectual food. To industry will be given a new significance of history and tradition, while the relationships which knit it in with the other portions of society's organized effort will be multiplied.